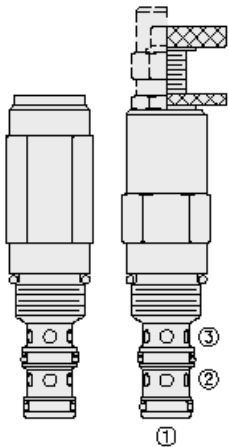




Overview



Description

The PR50-36XX is a spool type, pilot operated, hydraulic pressure reducing/relieving valve with internal pilot and internal spring chamber drain, designed to act as a pressure regulating device for secondary circuits. Port 2 may be protected by 60 mesh, 250 micron rated screen with option S.

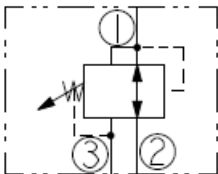
Operation

In its steady state, the PR50-36XX allows flow to pass bidirectionally from port 2 to port 1, with the spring chamber constantly drained at port 3. Upon attainment of a predetermined pressure at port 1, the spool shifts to restrict inlet flow from port 2, thereby regulating pressure at port 1. In this mode the valve will also relieve port 1 to port 3.

Features

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 345 bar (5000 psi).
- Hardened spool and cage for long life.
- Industry-common size.

Symbol



Ratings

Pressure Ratings

Pressure rating	344.7 bar (5000 psi)	- Note: Ports 1 and 2
	69 bar (1000 psi)	- Note: Port 3
Proof pressure	482.6 bar (7000 psi)	
Burst pressure	965.3 bar (14000 psi)	

Flow Ratings

Flow rating	56.8 lpm (15 gpm)	
Maximum pilot flow	0.170 lpm (0.045 gpm)	- Note: With maximum adjustment setting and with inlet pressure of 241 bar (3500 psi)

Temperature Ratings

Operating fluid temperature	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

Other Ratings

Corrosion protection	GPR50-36X - 960 hr salt spray per ASTM B117
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Operating Parameters

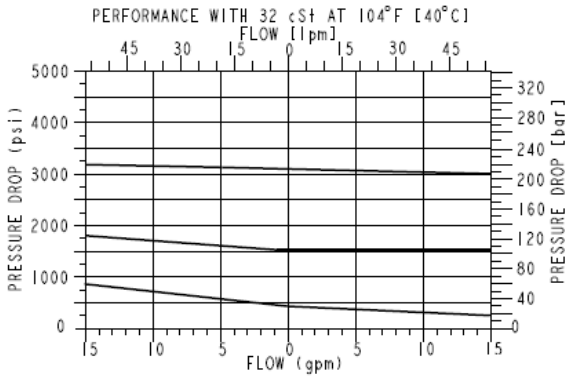
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406



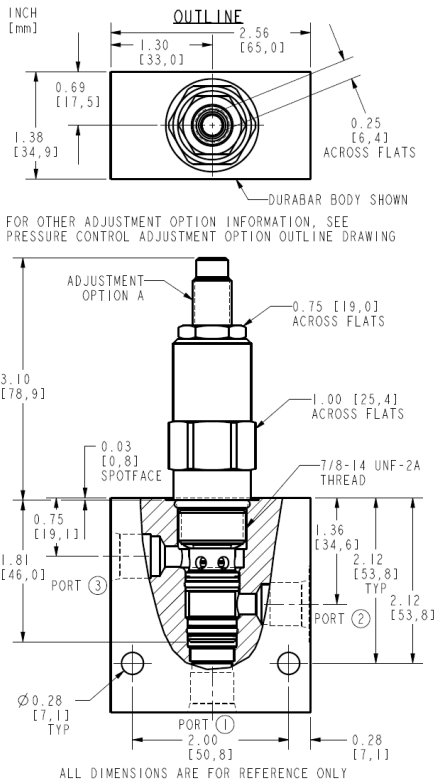
Properties

Unit weight	0.26 kg (0.57 lb)	- Note: PR50-36A
	0.28 kg (0.62 lb)	- Note: PR50-36B
	0.30 kg (0.66 lb)	- Note: PR50-36C
	0.25 kg (0.55 lb)	- Note: PR50-36F
	0.25 kg (0.55 lb)	- Note: PR50-36H
	0.30 kg (0.66 lb)	- Note: PR50-36L
Internal wetted surface area	145 cm ² (22.4 in ²)	- Note: "A". "B". "C" and "L"
	162 cm ² (25.1 in ²)	- Note: "F" and "H"

Performance



Dimensions



Installation Specifications

Cavity	VC10-3	
Cartridge installation torque	44.7 to 50.2 N-m (33 to 37 ft-lb) 32.5 to 35.3 N-m (24 to 26 ft-lb)	- Note: H-style plug
Orientation restriction	None	



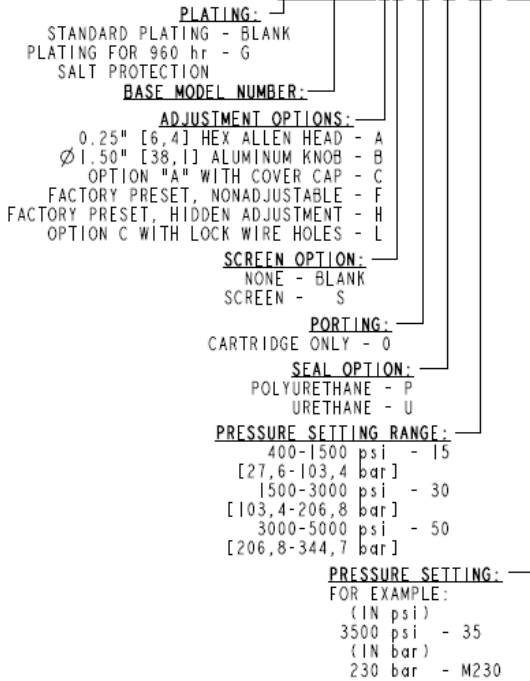
Accessories

Seal kit SK10-3P-BM - **Note:** Polyurethane
 SK10-3U-OO - **Note:** Urethane

Order Code

ORDERING INFORMATION:

XPR50-36XX-X-X-XX/XXXX



Model Options

PR50-36F-H-J-R/S

F Adjustment Option

CODE	DESCRIPTION
A	1/4" Hex Allen Head
B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
C	1/4" Hex Allen Head with Cover Cap
F	Factory Preset Non-Adjustable
H	Factory Preset Hidden Adjustment
L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

J Seal



CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

R Spring

CODE	DESCRIPTION
15	27.6 to 103.4 bar (400 to 1500 psi) Spring Range
30	103.4 to 206.8 bar (1500 to 3000 psi) Spring Range
50	206.8 to 344.7 bar (3000 to 5000 psi) Spring Range

S Setting

CODE	DESCRIPTION
MXXX	Spring Setting in XXX bar
XX	Spring Setting in XX psi (x 100)